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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,793	01/31/2005	Koichi Kinoshita	040894-7172	4671

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WASHINGTON, DC 20004

EXAMINER

KING, BRADLEY T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/522,793

Applicant(s)

KINOSHITA ET AL.

Examiner

Bradley T. King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 4,7,12,15,17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-11,13,14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1-05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Species I, Species a and Species ii in the reply filed on 10/18/2006 is acknowledged. The traversal is on the ground(s) that the statement that the linking features are known in the art was not supported. This is not found persuasive because the search report establishes that the linking features are known. Also note the rejections below.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7 and 15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected embodiment, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/18/2006.

While applicant indicates that claims 5 and 13 do not read upon the elected embodiments, it appears that the claims recite limitations directed towards each of the pin species in alternative form. The claims have been considered based on limitations directed towards the elected species.

Claims 4 and 12 recite a fourth diameter. The fourth diameter appears to be specific to the non-elected embodiment of figure 4. Claims 4 and 12 have been withdrawn from further consideration.

Claims 17-18 require "a circular arc-shaped cross section". This feature appears to be specific to the non-elected embodiment of figures 19-20. Claims 17-18 have been withdrawn from further consideration.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Please shorten the abstract and limit it to a single paragraph.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 8, 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

All the instant claims recite "the third diameter". There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-6, 9-10, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al (US# 5975252).

Suzuki et al discloses all the limitations of the instant claims including; a support member 2 fixed to a vehicle body and disposed adjacent to a rotor which rotates together with a wheel; a pair of pads 10 and 15 supported by the support member on both sides of the rotor slidably in an axial direction thereof; a caliper 5 supported displaceably in the axial direction of the rotor, the caliper being supported by a plurality of guide holes provided in the support member and a plurality of guide pins 8 respectively fitted in the guide holes; a claw portion 5c provided on one side of a bridge portion 5b of the caliper, the bridge portion straddling the rotor; and a piston 9 provided on another side thereof, wherein the pair of pads are pressed against both side surfaces of the rotor in consequence of the extension of the piston so as to effect braking, pressed-side shim plates 14 and 17 are respectively retained by those surfaces of back plates of the pair of pads which are located away from a rotor side, pressing-side shim plates 13 and 18 are respectively retained by pressing sides of the claw portion and the piston, and each of the pressed-side shim plates and each of the pressing-side shim plates are slidably abutted against each other. Note Suzuki et al explicitly discloses

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sliding between the plates 17-18 and plates 13-14 are "slidably abutted" as broadly recited.

Regarding claims 2 and 10, note lower pin in figure 2 has a series of alternating first and second diameters at its end.

Regarding claims 5 and 13, the shapes are trapezoids.

Regarding claims 6 and 14, the shapes are integral.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US# 5975252) in view of Tribuzio et al (US# 5562187).

Suzuki et al discloses all the limitations of the instant claims with exception to the disclosure of two pins having enlarged diameters at intermediary portions. Tribuzio et al discloses a similar brake caliper and further teaches the use of pins having enlarged diameters to provide elasticity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize pins such as taught by Tribuzio et al in the brake of Suzuki et al to provide elasticity to the pin assembly, thereby reducing stresses to potential damage to the guide pins.

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US# 5975252) in view of JP 1-224530.

Suzuki et al disclose all the limitations of the instant claims with exception to the disclosure of elastic rings on each side of the guide pin. JP 1-224530 discloses a similar brake and further teaches rings to reduce torque fluctuations and vibrations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize rings at the ends of the guide pins of Suzuki et al as taught by JP 1-224530 to reduce torque fluctuations and vibrations, thereby reducing noise and increasing user comfort.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Le Deit et al, Le Marchand, and Doi et al ('561 and '659).

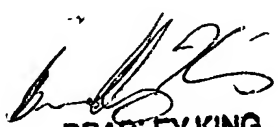
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BTK

 12/10/06
BRADLEY KING
PATENT EXAMINER